

**Open-Xchange™ Whitepaper**



# **Open-Xchange OXtender for Business Mobility**

v1.0

Author: Benjamin Otterbach

## Topics

<b>1. Introduction .....</b>	<b>3</b>
<b>2. Key functionality .....</b>	<b>4</b>
2.1. Exchange Active Sync client integration .....	4
2.2. Additional software for non ActiveSync clients .....	4
<b>3. Architecture .....</b>	<b>5</b>
3.1. OX Mobility Integration .....	5
3.2. Description of Components and Interfaces .....	6
3.2.1. Components .....	6
<b>4. User Provisioning and Single Sign On .....</b>	<b>7</b>
4.1. User Provisioning .....	7
4.2. Client setup .....	7

## 1. Introduction

This document describes the key functionality and basic administrative requirements for the "Open-Xchange OXtender for Business Mobility". Architectural wise we will show you how to connect your Open-Xchange installation to the OXtender for Business Mobility, and how the Open-Xchange users will benefit from the easy to use client setup. Also you will get a short overview of the supported devices, and what your users can expect from those.

Mobility of information and communication is not only key success factor in today's fast scaling business environments but also pro-consumers (consumer with high demand for professional communication and information) are eagerly looking for end-2-end cost-efficient solutions. Open-Xchange OXtender for Business Mobility enables users to securely manage contacts, calendar and tasks always synchronized with their Open-Xchange solutions – as well as having email communication on their mobile device.

### Customers' Benefits

- Users' personal communication data always synchronized with the Open-Xchange solutions and manageable anywhere via mobile phone.
- Easy-to-use without complex configuration to enable any kind of user to immediately use the features without technical background
- Attractive 'all-in' device coverage (incl. e.g. iPhone or Windows Mobile devices Version 6.x)
- Blackberry (PIM) and Android clients for Exchange Active Sync available
- End-to-end encrypted E-Mail and PIM-Data Push
- End-to-end encrypted Over-the-Air Synchronization of personal and shared Contacts, Calendar and Tasks based on the ActiveSync protocol
- End-to-end encrypted Over-the-Air Synchronization of global and public address book and public calendar based on the ActiveSync protocol
- Account Management for users transparently via Open-Xchange solution
- Bases on Microsoft Exchange Active Sync 2.5 (EAS) standard
- Single-Sign-On (SSO) Management

## **2. Key functionality**

Speaking of mobility offerings, most known solutions are limited either to certain smart phones or demand cost-intensive deployment of proprietary server solutions. Open-Xchange OXtender for Business Mobility provides an end-to-end information mobilization perfectly covering the needs of users including a easy to use client setup description.

### **2.1. Exchange Active Sync client integration**

As of today, a wide range of mobile devices support the ActiveSync standard. By offering ActiveSync support for the OXtender for Business Mobility those clients can be used for the Open-Xchange synchronization. Open-Xchange also offers a client setup description for a wide range of devices, which makes it easy for users to start with their Open-Xchange client synchronization.

### **2.2. Additional software for non ActiveSync clients**

In addition to the native ActiveSync client integration you will find a wide set of clients for several other software platforms, such like Blackberry or Symbian. Those clients will use the ActiveSync protocol to connect your non-native ActiveSync client to the Open-Xchange OXtender for Business Mobility.

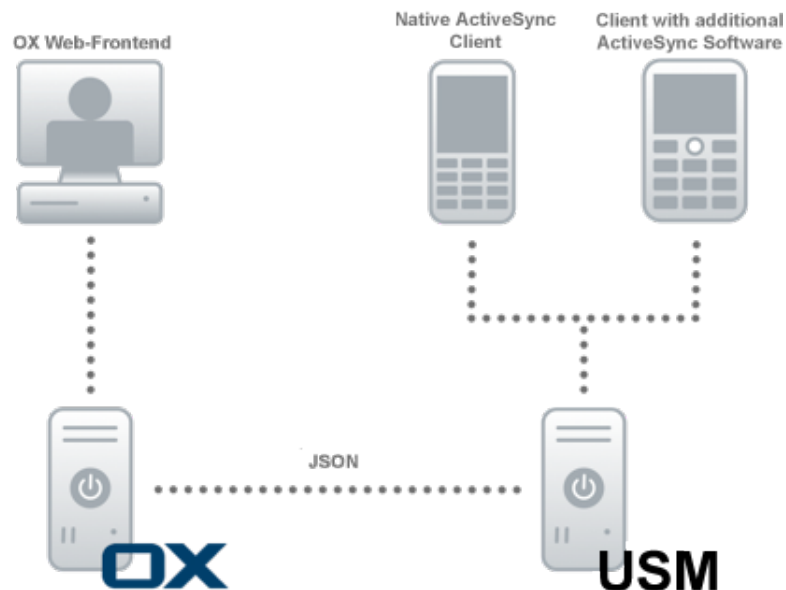
### 3. Architecture

The architecture of the Open-Xchange OXtender for Business Mobility is designed to allow a complete transparent integration into the providers Open-Xchange infrastructure. All necessary tasks will be done through the Open-Xchange installation, without the need to interact with the mobility solution directly.

#### 3.1. OX Mobility Integration

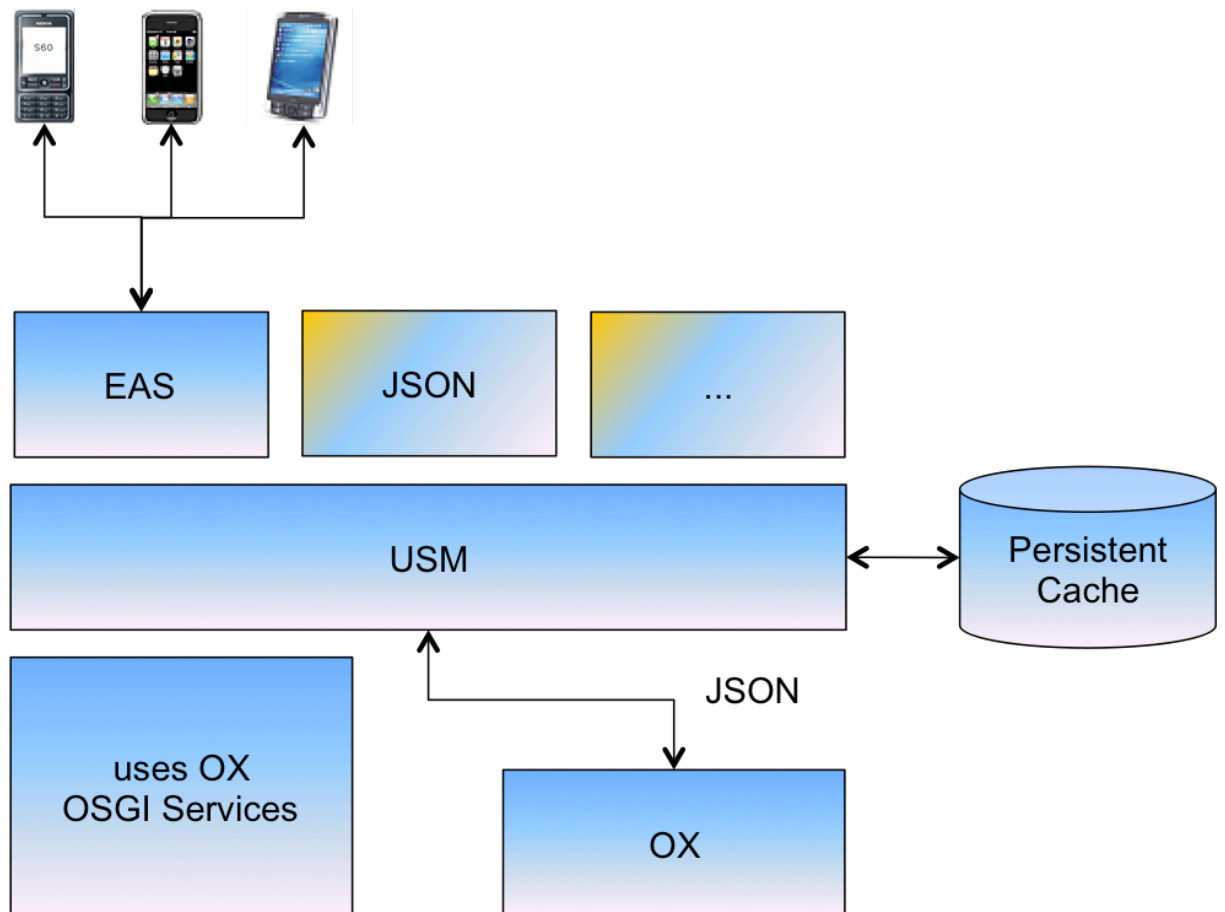
The system basically consists of two components:

- The Open-Xchange system, providing web frontend and containing all users data
- The mobility add-on, synchronizing with the mobile device. This add-on can be installed on the same server as Open-Xchange, or it can be deployed to a dedicated server. The add-on is a OSGi Bundle which can be simply installed by using the package manager.



### 3.2. Description of Components and Interfaces

The following diagram gives a deeper insight into the necessary software components and communication interfaces included in the solution.



#### 3.2.1. Components

1. The Open-Xchange Server which handles all user data
2. The so called USM Layer which is a synchronization layer for several Open-Xchange add-on's
3. The EAS Server which is handling the ActiveSync protocol
4. The client which communicates via ActiveSync to the EAS Server

## **4. User Provisioning and Single Sign On**

### **4.1. User Provisioning**

After the Open-Xchange OXtender for Business Mobility has been installed in the system, the provisioning interfaces of Open-Xchange (RMI, CLT, SOAP) now have two additional user flags that can be activated (EAS, USM) to grant a user access to the ActiveSync functionality. So existing provisioning interfaces (for example a web based frontend) can be easily extended to allow the administrative configuration of the Open-Xchange OXtender for Business Mobility.

### **4.2. Client setup**

To ensure that the setup of the client by the user is as easy as possible we offer a wide set of setup descriptions for nearly every ActiveSync mobile device. Once the user has been activated for the Mobility usage, the last thing to do is to enter the Server address and the user credentials in the ActiveSync setup of his mobile device. There is no need to activate it in the Open-Xchange application.

As the Open-Xchange OXtender for Business Mobility is designed to use the same authentication module the system already has configured, the user will simply use the same credentials he already uses for the login to the Open-Xchange Web-Frontend. No additional password setup is required!